

January 16, 2001; 09/824,980, filed April 3, 2001; 09/817,560, filed March 26, 2001; 09/817,687, filed March 26, 2001; and U.S. Patent No. 6,487,769, issued December 3, 2002.

IN THE CLAIMS

Please amend the claims in accordance with the following rewritten claims in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

1. (Twice Amended) A switched reluctance machine comprising:

a stator including a plurality of circumferentially-spaced stator segment assemblies with a stator segment core and winding wire wound around said stator segment core that has slot fill that is greater than 65%;

a rotor defining a plurality of rotor poles, wherein said rotor tends to rotate relative to said stator to maximize the inductance of an energized winding; and

a drive circuit that energizes said winding wire around said stator segment assemblies to control operation of said switched reluctance machine based on a rotational position of said rotor.

9. (Twice Amended) In a switched reluctance machine that includes a stator, a rotor and a machine housing, an improved stator comprising:

a plurality of circumferentially-spaced stator segment assemblies that are arranged around an inner surface of said machine housing of said switched reluctance machine,

each of said stator segment assemblies defining a salient stator pole that extends in a radially inward direction, wherein inter-polar stator slots are defined between adjacent stator segment assemblies, and

said stator segment assemblies including a stator segment core and winding wire that is wound around said stator segment core and that has a slot fill that is greater than 65%.

16. (Twice Amended) A switched reluctance machine comprising:

a machine housing;

a rotor that rotates relative to said machine housing of said switched reluctance machine; and

a stator that is mounted on an inner surface of said machine housing, said stator including a plurality of circumferentially-spaced stator segment assemblies, wherein said stator segment assemblies include a stack of stator plates forming a stator segment core and winding wire that is wound around said stator segment core and that has a slot fill that is greater than 65%,

wherein each of said stator plates has a generally "T"-shaped cross-section, a radially outer rim section, and a tooth section that extends radially inwardly from a center portion of said radially outer rim section.